

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric	
Company (U 39-E) for Authorization to	Application 16-03-001
Procure Energy Storage Systems during the	(Filed March 1, 2016)
2016-2017 Biennial Procurement Period	
Pursuant to Decision 13-10-040	
Application of Southern California Edison	
Company (U 338-E) for Approval of Its 2016	Application 16-03-002
Energy Storage Procurement Plan.	(Filed March 1, 2016)
Application of San Diego Gas & Electric	
Company (U 902 M) for Approval of Energy	Application 16-03-003
Storage Procurement Framework and Program	(Filed March 1, 2016)
As Required by Decision 13-10-040.	

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) OPENING BRIEF

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Pursuant to Rule 13.11 of the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission") and the schedule set forth in the Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge issued June 3, 2016 ("Scoping Memo"), Southern California Edison Company ("SCE") respectfully submits this opening brief.

I.

INTRODUCTION & BACKGROUND

On December 16, 2010, the Commission opened Rulemaking ("R.") 10-12-007 to implement the provisions of Assembly Bill ("AB") 2514 (Stats. 2010, ch. 469). AB 2514

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Pub. Util. Code Section 2836 et seq.

required the Commission to determine appropriate targets, if any, for each load-serving entity ("LSE") to procure viable and cost effective energy storage systems, and to do so by October 2013. On October 21, 2013, the Commission issued Decision ("D.") 13-10-040 (the "Storage Decision"), which, among other things, requires the investor-owned utilities ("IOUs") to file a biennial procurement application containing proposals for energy storage procurement, with specific requirements, explanations, descriptions, and methodologies.²

On March 26, 2015, the Commission opened a successor rulemaking R.15-03-011 to consider policy and implementation refinements to the Energy Storage Procurement Framework adopted in the Storage Decision. On January 28, 2016, the Commission issued D.16-01-032 (the "Track 1 Decision") which, among other things, maintained the IOUs' flexibility to design their solicitation processes, allowed greater flexibility of energy storage targets among grid domains, and extended the authorization of the Power Charge Indifference Adjustment mechanism for bundled service energy storage procured via the 2016 solicitation.

On March 1, 2016, SCE filed Application 16-03-002 and its 2016 biennial procurement plan ("2016 Plan") in accordance with the Storage Decision and the Energy Storage Procurement Framework, as modified by the Track 1 Decision. SCE's 2016 Plan outlines SCE's proposed energy storage procurement activities for the 2016 energy storage procurement cycle, including its valuation methodology and selection process, and its proposed procurement methodologies. As described in further detail below, and as supported by the record in this proceeding, SCE's 2016 Plan is reasonable and should be approved. SCE's 2016 Plan meets the requirements in the Storage Decision, and is consistent with the policy objectives and goals of the Commission's Energy Storage Procurement Framework.

See D.13-10-040, Appendix A, Energy Storage Procurement Framework and Design Program, at 7-10.

THE COMMISSION SHOULD APPROVE SCE'S APPLICATION

A. Parties Provided Minimal Comments On the Issues Listed in the Scoping Memo

The Scoping Memo lists five issues applicable to SCE's Application and 2016 Plan:

- 1. Should PG&E's, SCE's, and SDG&E's proposed procurement plans for the 2016 Biennial Solicitation be adopted?
- 2. Do the proposed procurement plans, including the evaluation methodologies for shortlisting the utilities' 2016 Energy Storage RFO protocols, comply with D.13-10-040 and D.16-01-032?
- 3. Have the utilities correctly counted existing eligible energy storage credits toward their 2016 energy storage allocated to each of the investor-owned utilities according to transmission, distribution, and customer grid domains.
- 4. Are the safety requirements in the utilities' 2016 Energy Storage RFO protocols reasonable and will the utilities' proposed procurement plans ensure safe and reliable delivery of energy to customers?
- 5. Are the terms and conditions for the provision of energy storage services in the utilities' 2016 Energy Storage RFO protocols reasonable? 3

No party has stated that SCE's 2016 Plan should not be adopted. No party has stated that SCE has incorrectly counted existing eligible energy storage credits. No party has stated that the safety provisions in SCE's *pro forma* agreements or the safety protocols addressed in the 2016 Plan are unreasonable. Rather, parties' comments were limited to questions 2 and 5. As explained in more detail below, SCE's Application and its supporting testimony show that SCE's 2016 Plan meets the Commission's requirements, and the terms and conditions of SCE's proposed solicitation are reasonable.

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Scoping Memo, pp. 4-5. The Scoping Memo listed one additional issue that was specific to San Diego Gas & Electric's Application.

1. SCE's 2016 Plan Meets the Requirements of D.13-10-040 and D.16-01-032

The Storage Decision enumerates the requirements for the IOUs' biennial procurement plans. Among other things, the IOUs must include: (1) an updated table with estimates for biennial procurement targets for each grid domain, accounting for any excess procurement or shortfall, and any shifting of MW between domains; (2) an explanation of the type of storage resources and the associated MW quantities the IOU intends to procure; (3) a description of how the IOU intends to procure resources, specifying the structure of any RFO or alternative procurement processes and timelines; (4) a proposed methodology for bid evaluation; (5) pro forma agreement(s); (6) a report on all storage resources procured to date in all Commission proceedings; and (7) the IOU's request for cost recovery authorization as appropriate.

SCE's 2016 Plan meets each of these requirements, as well as the others enumerated in the Storage Decision.⁴ Only one party protested whether SCE's 2016 Plan complied D.13-10-040 and D.16-01-032. Specifically, Green Power Institute ("GPI") argued that SCE's Application is deficient because it does not include a cost effectiveness analysis.⁵ Further, GPI claimed that SCE must add "an explicit criterion that contracts seeking approval must be cost-effective" and define "cost effective." This is incorrect. SCE's proposed evaluation methodology includes "determining the revenue streams of benefits and costs" and establishing a "quantitative metric that determines the relative costs and benefits of the offers." As such, it complies with the direction in the Storage Decision. Moreover, it is for the Commission – not SCE – to determine whether the projects submitted for approval meet the Commission's standard for cost-effectiveness. The Commission has not defined "cost-effective." In light of the mandate to procure energy storage, SCE submits that "cost effective" refers to the reasonableness of the

See Attachment A to this brief identifying where each of the requirements in D.13-10-040 are addressed in SCE's 2016 Plan.

⁵ See GPI Protest, p. 5.

 $[\]frac{6}{}$ Id at 6

⁷ See SCE-01, Opening Testimony of Ranbir Sekhon, at Chapter IV.B, p. 35.

value proposition to SCE's customers relative to the procurement objective. SCE's 2016 Plan, including its valuation methodology for shortlisting the projects solicited in the 2016 Energy Storage RFO ("ES RFO"), complies with D.13-10-040 and D.16-01-032.

2. The Terms and Conditions for the Provision of Energy Storage Services in SCE's 2016 Plan Are Reasonable

SCE's 2016 Plan proposes to launch a 2016 ES RFO that will seek offers for Resource Adequacy at specific locations, and potentially innovative use cases such as distribution deferral. Protests to SCE's Application requested specific changes to SCE's procurement practices or proposed solicitation. For example, STEM argued that "the utilities' procurement frameworks should not include requirements, such as mandatory utility ownership, site control, and Phase 1 Interconnection Study requirements, for applications such as distribution reliability." GPI sought to dictate the required online date, and CESA has recommended that SCE consider full toll contracts in addition to RA-only contracts.

As SCE indicated in its response to these parties' protests, Track 1 of the Energy Storage Rulemaking included a detailed review – including a workshop – of the utilities' procurement practices, with the goal of establishing "best practices" for future procurement. The Commission declined to make any changes to the utilities' procurement practices at that time. More specifically, D.16-01-032 provided that:

• The Commission would "not require changes to the RFO process prior to consideration of the results of the first energy storage RFO." 9

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STEM Response at 3. It should be noted that SCE's application does not require "mandatory utility ownership," and SCE is in fact exploring opportunities to procure third-party owned energy storage for innovative use-case applications in its 2016 RFO. See SCE-01, Opening Testimony of Gary Stern, Chapter II.B, p. 7.

⁹ D.16-01-032 at Conclusion of Law 1.

- "The utilities should retain the flexibility to include specific use-case or project variations in their energy storage RFOs, but should not be required to do so." 10
- "The IOUs should retain the flexibility to require interconnection studies or specific site control information in their energy storage RFOs, but should not be required to do so."

As such, the Commission granted the utilities the flexibility to design their RFOs in the manner they deem appropriate. The modifications proposed by parties fall within the utilities' discretion to procure the products and services in the manner that meets the utilities' needs and risk tolerances. The terms and conditions of this procurement in SCE's proposed solicitation documents are reasonable and should be approved.

B. SCE's 2016 Plan Furthers the Policy Objectives and Goals of the Commission's Energy Storage Procurement Framework

According to the Storage Decision, the Commission's goal is to transform the energy storage market to overcome the barriers that are hindering broader adoption of energy storage technologies. Accordingly, despite having met its 2016 procurement target, SCE's 2016 Plan proposes to conduct a 2016 energy storage solicitation to maintain momentum in transforming the energy storage market. In addition to seeking projects that contribute specifically to Resource Adequacy, SCE is exploring additional use cases to include in its 2016 solicitation, such as energy storage that can facilitate distribution deferral. SCE's 2016 Plan thus furthers the Commission's goals and objectives to pursue reasonable and cost-effective energy storage solutions that will help maintain system reliability, integrate renewable resources, and reduce greenhouse gases, and should be approved.

 $[\]underline{10}$ *Id.* at Conclusion of Law 2.

¹¹ *Id.* at Conclusion of Law 3.

¹² D.13-10-040, p. 7.

¹³ See SCE-01, Opening Testimony of Gary Stern, Chapter II, pp. 4-8.

III.

CONCLUSION

For all of the foregoing reasons, the Commission should approve SCE's Application in its entirety and grant the findings requested by SCE. In particular, the Commission should issue a decision:

- 1. Granting expedited consideration of this Application;
- 2. Approving the Application in its entirety;
- 3. Approving SCE's proposed 2016 Plan;
- 4. Approving SCE's plan for cost recovery;
- 5. Authorizing SCE to launch its 2016 Energy Storage RFO; and
- 6. Granting such other and further relief as the Commission finds just and reasonable.

Respectfully submitted,

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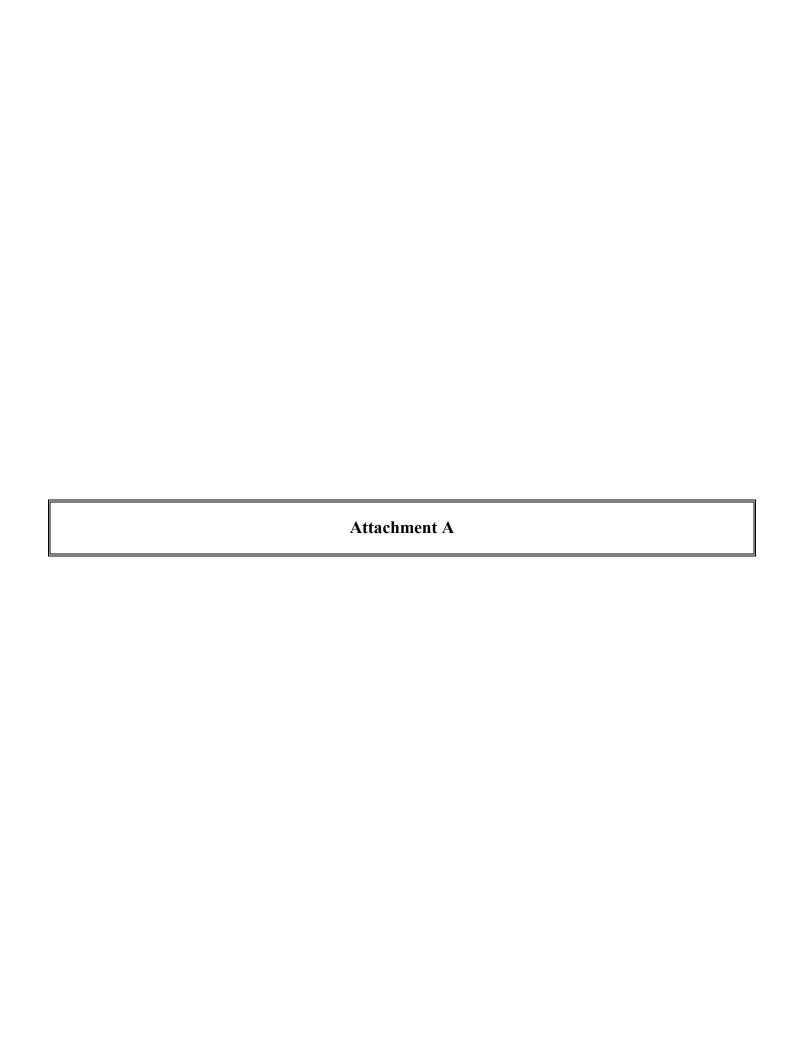
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List of Requirements for Biennial Procurement Applications in D.13-10-040

Requirement ¹	Location in SCE's
	Application/Testimony
 An updated table with estimates for biennial procurement targets for each storage grid domain from current year to 2020 adjusted to account for: any offsets expected to be claimed by the IOU as credits, against the procurement targets applicable at the time of the application for storage resources procured pursuant to Commission authorizations in any proceeding in accordance with the guidelines in Section 2.d above (resulting in a reduction in target), any deferments of procurement targets authorized by the Commission in prior procurement cycles as discussed in the "Deferment" section below (resulting in an increase in target), any excess procurement in the prior procurement cycle or shortfall resulting from contract rejections, contract cancellations, or less than expected installations of customer-owned projects since the last procurement cycle (resulting in a reduction or increase in target), and any shifting of MW between the transmission and distribution grid domains planned by the IOU (resulting in an increase or a reduction of target in those domains); 	SCE-01, Opening Testimony of G. Stern, Chapter III, pp. 15-28. Summary provided in Table III-9, p. 28.
Reference to 1) needs study by the California Independent System Operator for the IOU's system, local, and flexible needs, if available, or 2) upgrade needs identified in the IOU's transmission or distribution planning studies;	SCE-01, Opening Testimony of G. Stern, G. Chinn, and B. Tolentino, Chapter II.C, pp. 11-14.
A list of all applicable rules and statutes impacting the procurement plan;	Application 16-03-002, Attachment 1.
An explanation of the type of storage resources and the associated MW quantities the IOU intends to procure, categorized by grid domains and use cases;	SCE-01, Opening Testimony of G. Flores, pp. 29-30.
A detailed description of how the IOU intends to procure resources specifying the structure of any RFO or alternative procurement processes and related timelines;	SCE-01, Opening Testimony of G. Flores, pp. 31-34.
Operational requirements, to be applied either to all projects or separately with respect to transmission, distribution, and customer-sited storage. The requirements shall include, at a minimum: • Grid optimization services specific to the operational needs of the load-serving entity, such as any service intended to contribute to	SCE-01, Opening Testimony of G. Stern, Chapter II, pp. 5-8.

¹ See D.13-10-040, Appendix A, pp. 7-10.

reliability needs, or defer transmission and distribution upgrade investments; • Attributes or services intended to integrate renewable energy; • Greenhouse gas emissions-reducing attributes, such as permanent load shifting away from greenhouse gas emitting fossil generation or reduction of demand for peak electrical generation using fossil fuels; A proposed methodology for an analysis that evaluates bids on cost and fit	SCE-01, Opening
 The full range of benefits and costs identified in the use case framework developed and the EPRI and DNV KEMA reports submitted in this proceeding; An optional utility-specific proprietary evaluation protocol; and An evaluation protocol consistent across the IOUs that includes a consistent set of assumptions and methods for valuing storage benefits, such as market services and avoided costs, and estimating project costs that allow adjustments for utility-specific factors (such as location, portfolio, cost of capital, etc.) and utility-specific modeling tools based outputs affecting valuation as appropriate to provide a consistent basis for comparison across utilities, bids, and use cases. The consistent evaluation protocol shall be developed by the IOUs through joint consultation between the IOUs and the Commission Staff prior to the filing of the application and referenced in that application; 	Testimony of R. Sekhon, Chapter IV, pp. 35-39 (for valuation analysis), and 40 and Appendix C (for Consistent Evaluation Protocol).
Proposed storage equipment/power/services purchase agreements for successful bids involving third party-owned or –aggregated projects;	SCE-01, Appendix B.
A report on all storage resources procured to date in all Commission proceedings. In the report, the IOUs are directed to identify the type of storage technology, the capacity of the projects (in MW & MWh), the location of the project (city and zip code level if public), the proceeding in which it is procured, and the procurement mechanism (e.g., RFO, RAM, SGIP, etc.), applicable storage grid domain, status of the project (CPUC approval, construction stage), estimated online date, expected operational life, primary and secondary applications of the project, technology manufacturer and project owner & operator. Energy Division may provide additional direction on changes in the required content an and format of the reports as needed; and	SCE-01, Appendix A.
Request for cost-recovery authorization as appropriate.	SCE-01, Opening Testimony of M. Sheriff, Chapter VII, pp. 47-48.